Summary of Radiological Incident Reports January 1, 1993 to December 31, 2003

Los Alamos National Laboratory
HSR-12, Radiation Protection Services
5-7921, MS-E546
bbates@lanl.gov

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Note: The data contained in this report is intended for internal **LANL use only**. It is a working document of use only within LANL. The data is incomparable to any and all other organizations outside of LANL. This summary is categorized as a "working document". Contact the preparer of this summary for sources of data that can be comparable to other organizations.

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Introduction

This summary contains radiological data unique to Los Alamos National Laboratory (LANL). LANL developed the radiological incident report (RIR) as a management tool. Its purpose is as a working document to record radiological incidents that occur, but may not trigger an Occurrence Report {DOE Order 232.1, whose data are compiled by the Occurrence Reporting and Processing System (ORPS)}. As such, any "incident" causes no harm to personnel or the environment, and may only be procedural in nature. Those "occurrences" that may result in harm to personnel or the environment are reported via the ORPS. This summary report is therefore intended for internal LANL use only, even though it is available to any and all whom ask for copies. None of the data contained herein are comparable to organizations outside of LANL. The summary was developed by HSR-12 (ALARA Metrics) as merely a means of communicating metric trends that could be of use to LANL management in its strive to achieve ALARA (as low as reasonably achievable). Unauthorized and or inappropriate use of this data outside LANL could result in changes to the report that will affect its usefulness within LANL and our attempt to improve upon the past.

The first year that an attempt was made to compile this data into this format was 1993. Due to low participation in 1993, any correlation of 1993 data to following year's data would be statistically inappropriate. Beginning in CY2001 the radiological incident reports were generated by HSR-1 using a web-based system. All data for CY2001 and forward has been extracted from this system. Prior to CY2001 the individual radiological incident reports were copied, sent to HSR-12 and manually entered into a queryable database.

A note about some of the charts. Most of the data presented is grouped in terms of technical area. The technical areas with the majority of the radiological incidents are displayed. All other technical areas not specifically designated on the chart are grouped as "AO": or "all others".

Any comments or questions should be directed to the preparer of this report as indicated on the front page.

Some Radiological Incident Reporting Criteria

<u>Category</u> <u>Reporting Level</u>

Nasal Swipe alpha >= 50 dpm (sum of both nostrils); beta/gamma >= 500 dpm (sum of both nostrils)

Wound Count Any wound count Skin Contamination Any detectable level

Personal/Laboratory Clothing Any detectable level

CAM alarm Any CAM alarm (true or false)

Protective Clothing (Anti-C) alpha >= 1000dpm/100cm²; beta/gamma >= 5000dpm/100cm² or 0.25mR/hr

(unanticipated)

TA-59

TA-60

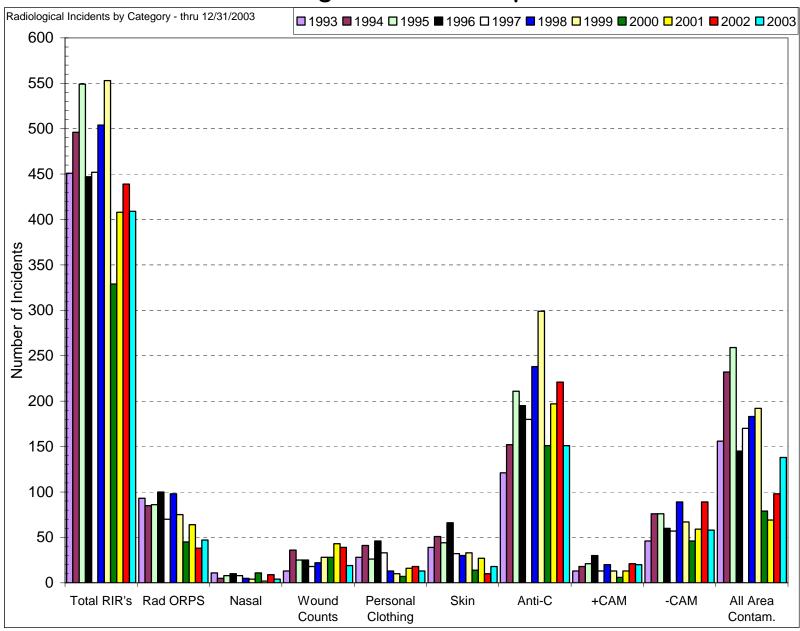
All Others (AO)

Totals

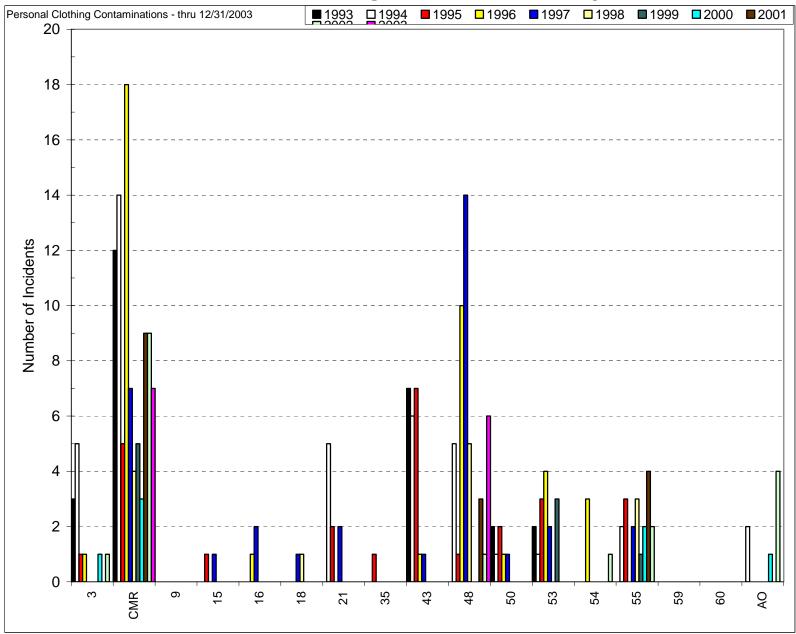
2003 SUMMARY - RADIOLOGICAL INCIDENT REPORTS Type Of Incident thru Pers/Lab **Area Contaminations** Air Monitoring 12/31/03 Clothing Anti-C CAM Total **Wound Counts** Skin ΑII Outside Nasal RIR's RIR* Contam. FAS **RCA** Control Location <0.05nCi .05 to 2nCi >2.0nCi Contam. Contam. Positive Negative Areas **RBA** TA-0 TA-2 TA-3 CMR TA-8 TA-9 TA-15 TA-16 TA-18 TA-21 TA-33 TA-35 TA-43 TA-46 TA-48 TA-50 TA-53 TA-54 TA-55

2001rir_a_table.xls

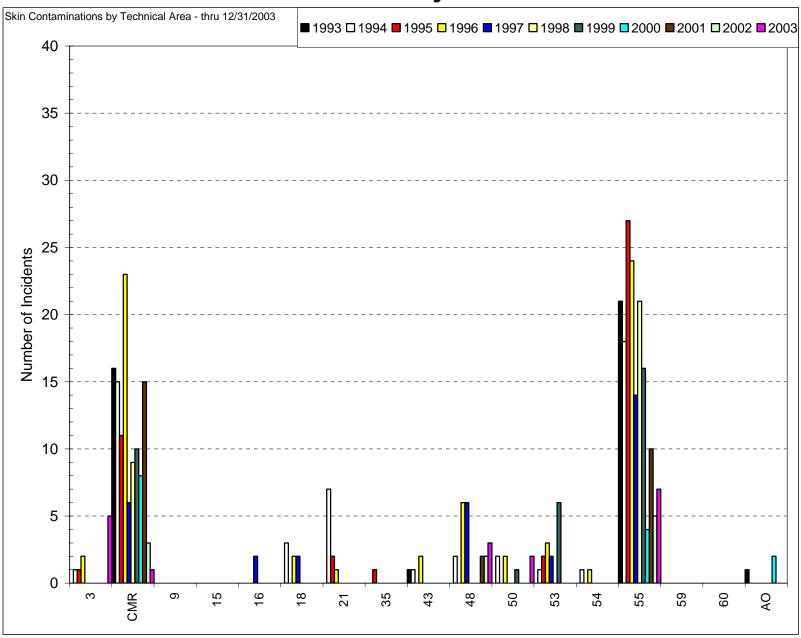
Radiological Incident Reports



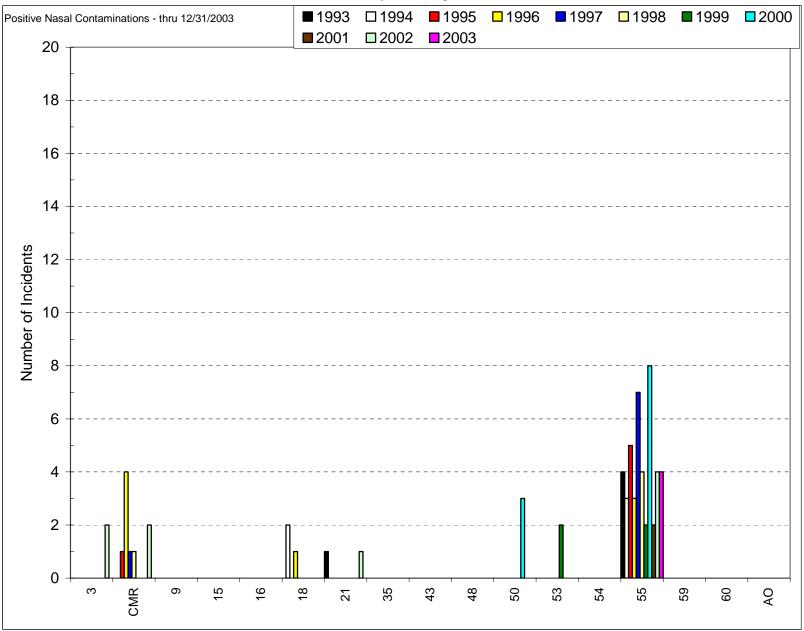
Personal/LANL-Issued Clothing Contaminations by Technical Area



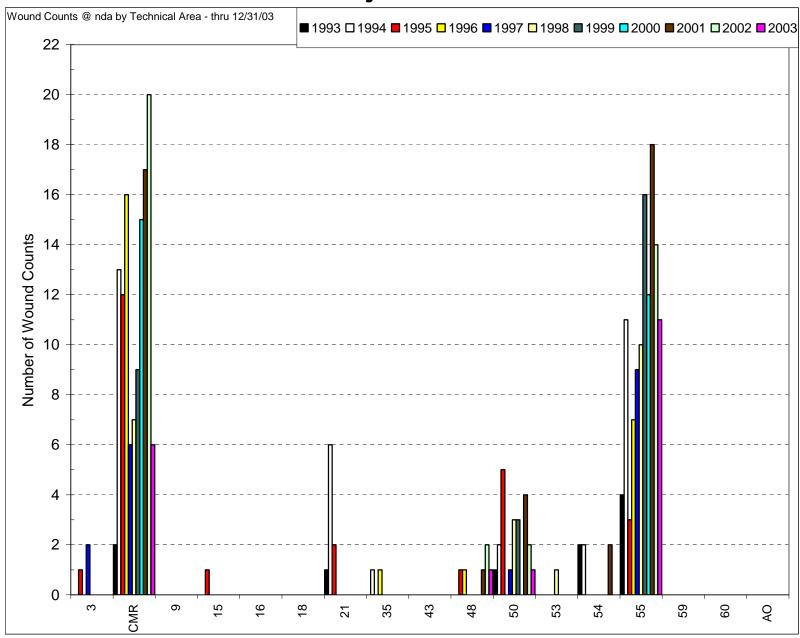
Skin Contaminations by Technical Area



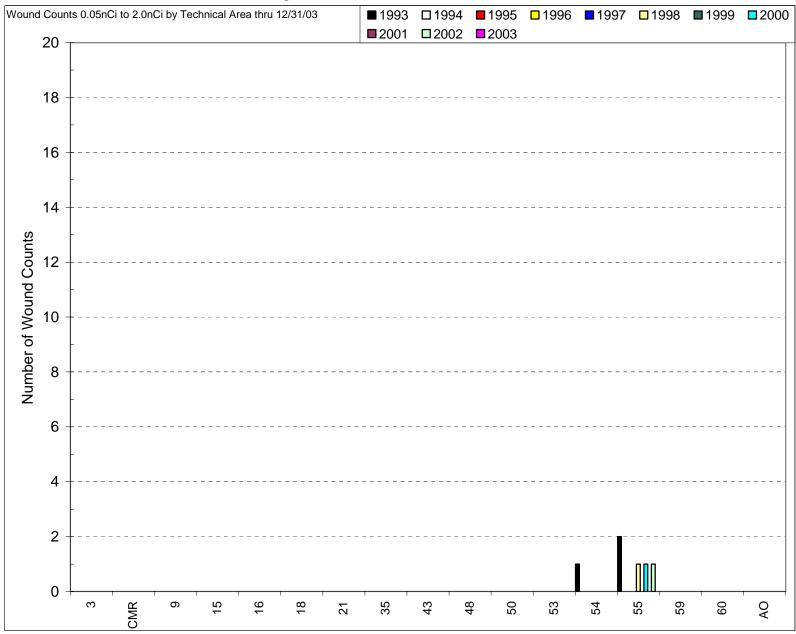
Positive Nasal Swipes by Technical Area



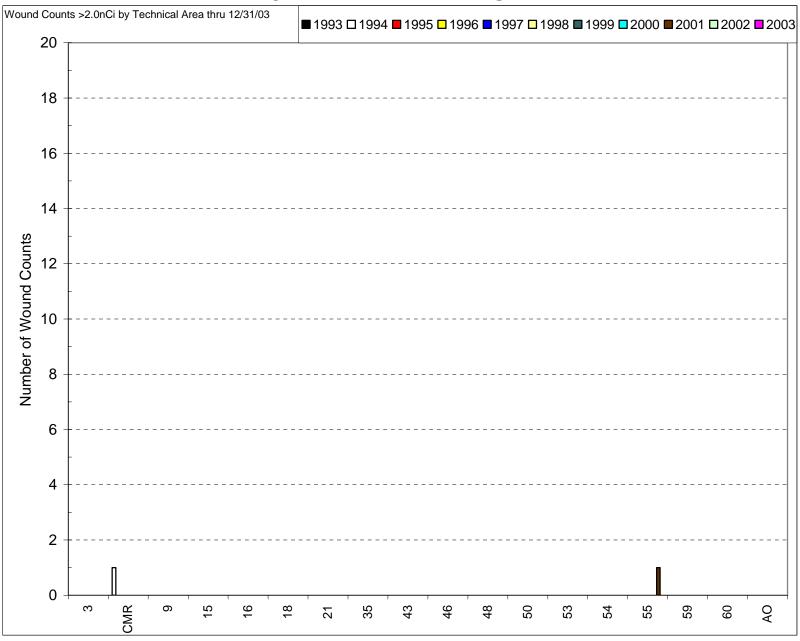
Wound Counts by Technical Area – nda



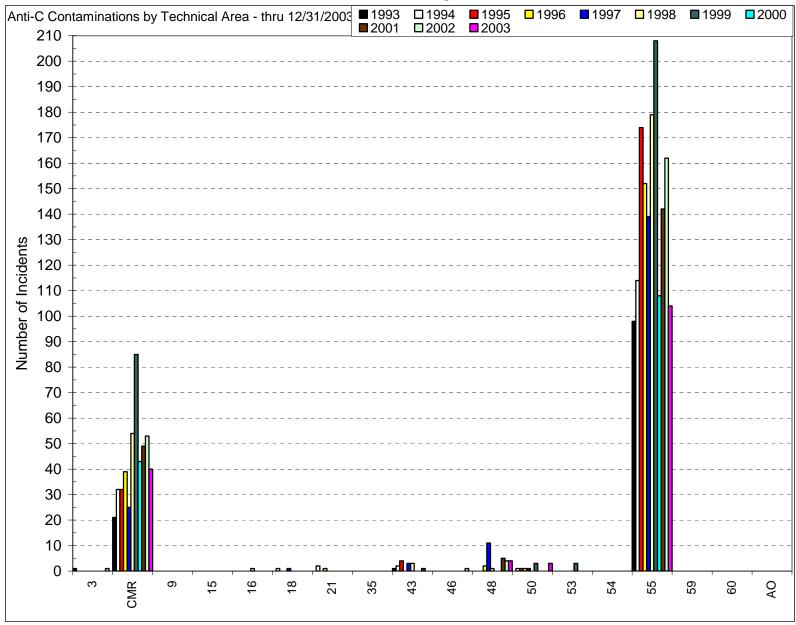
Wound Counts by Technical Area – 0.05nCi to 2.0 nCi



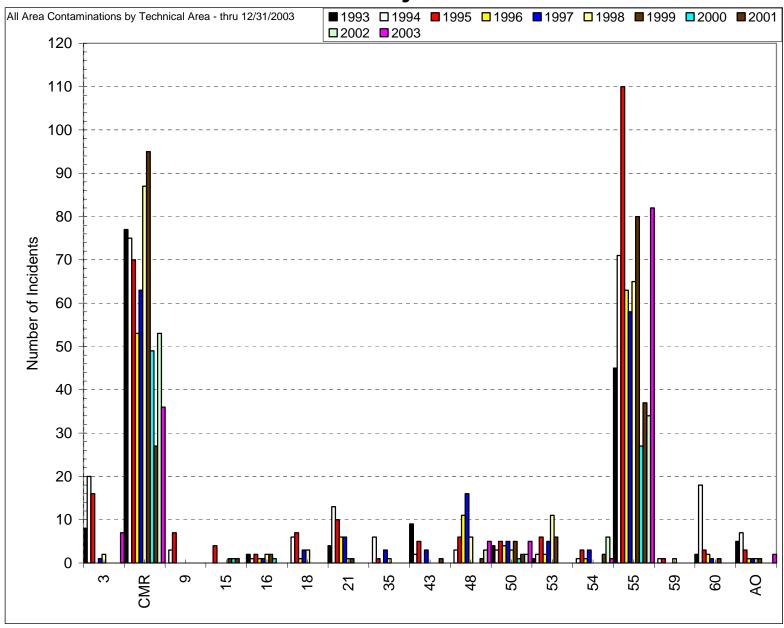
Wound Counts by Technical Area – greater than 2.0nCi



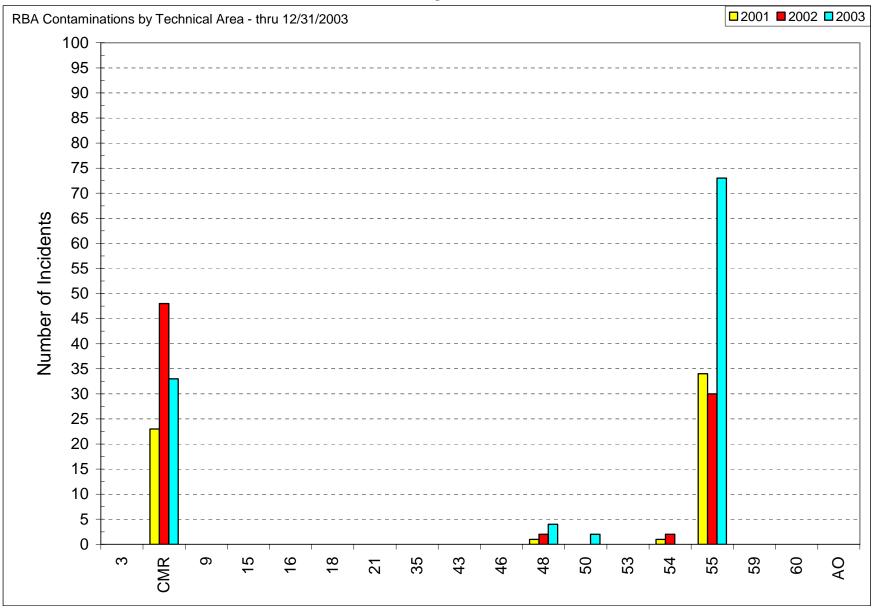
Anti-C Contaminations by Technical Area



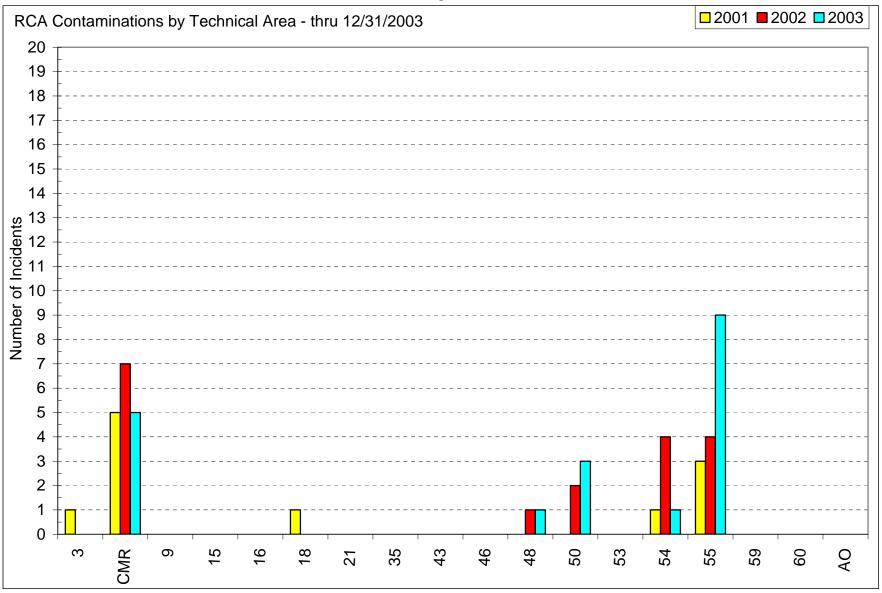
Area Contaminations by Technical Area – All



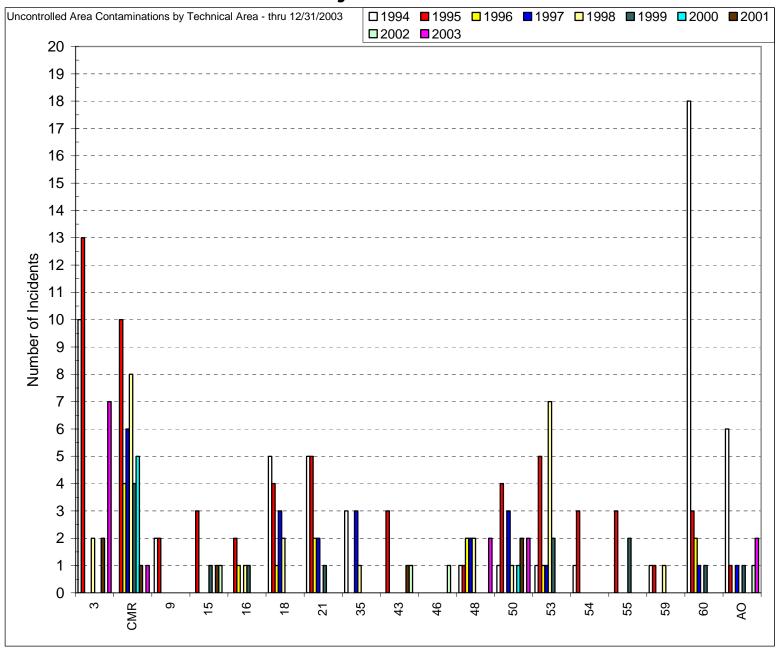
Area Contaminations by Technical Area – RBA



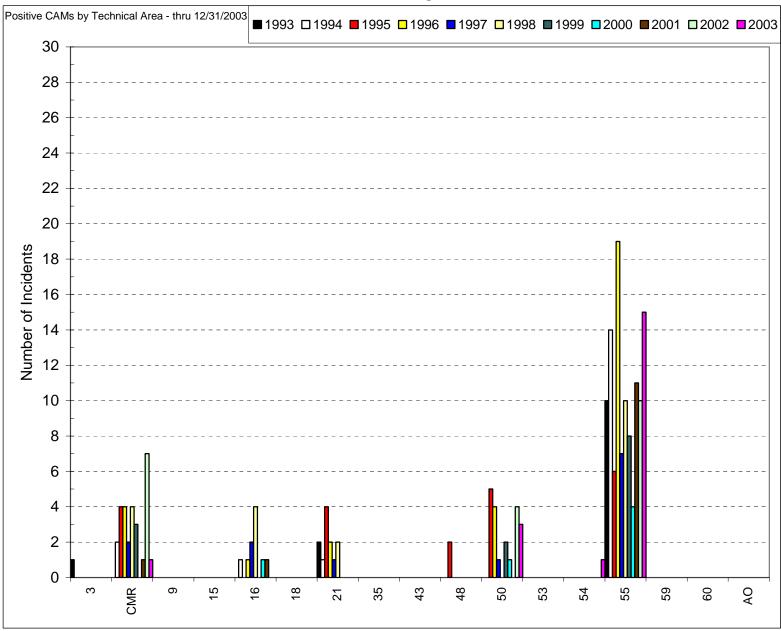
Area Contaminations by Technical Area – RCA



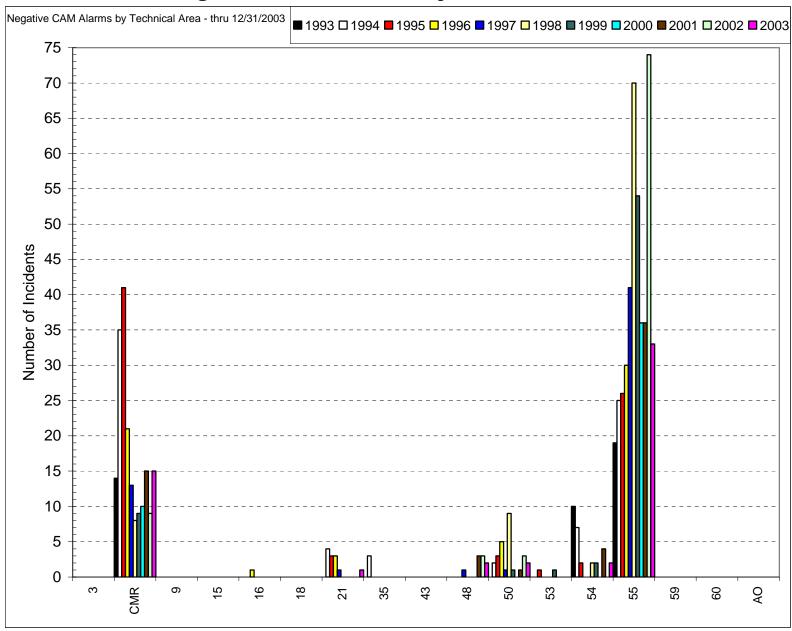
Area Contaminations by Technical Area – Uncontrolled



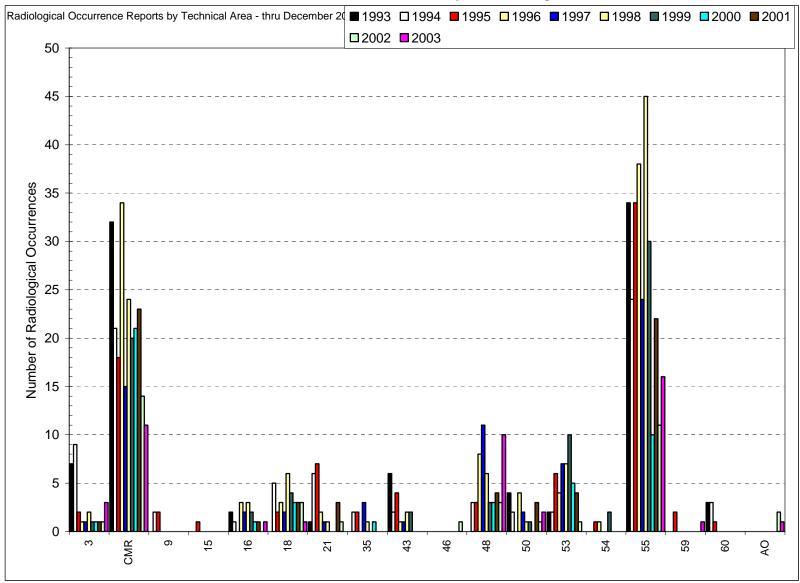
Positive CAM Alarms by Technical Area



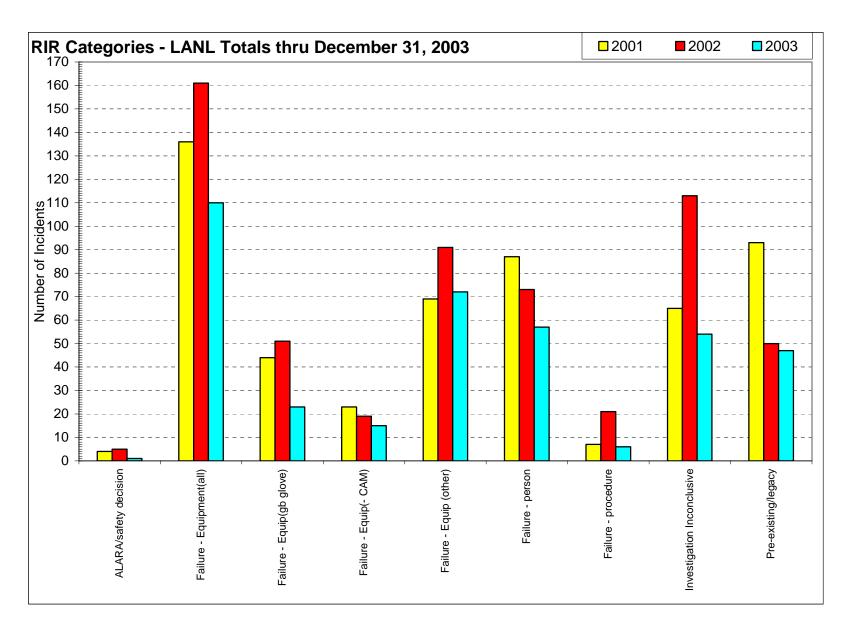
Negative CAM Alarms by Technical Area



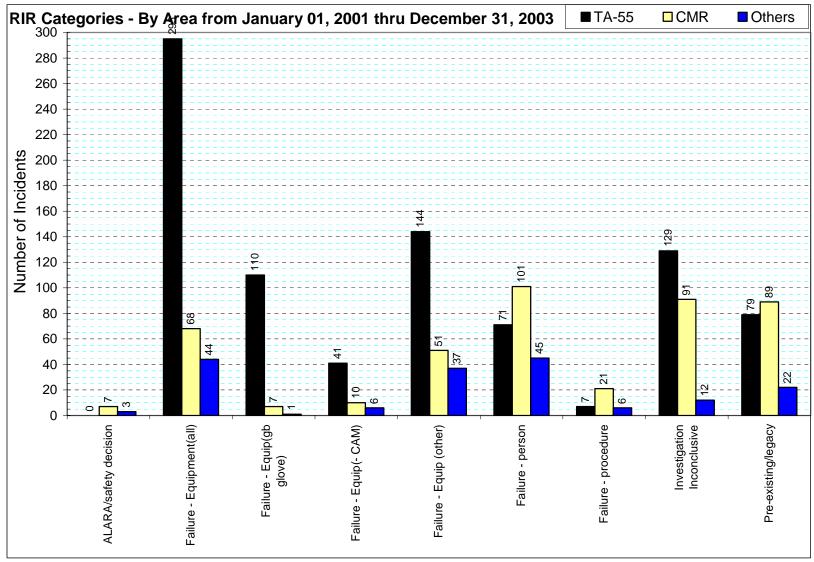
DOE Order 232.1, Occurrence Reports, by Technical Area



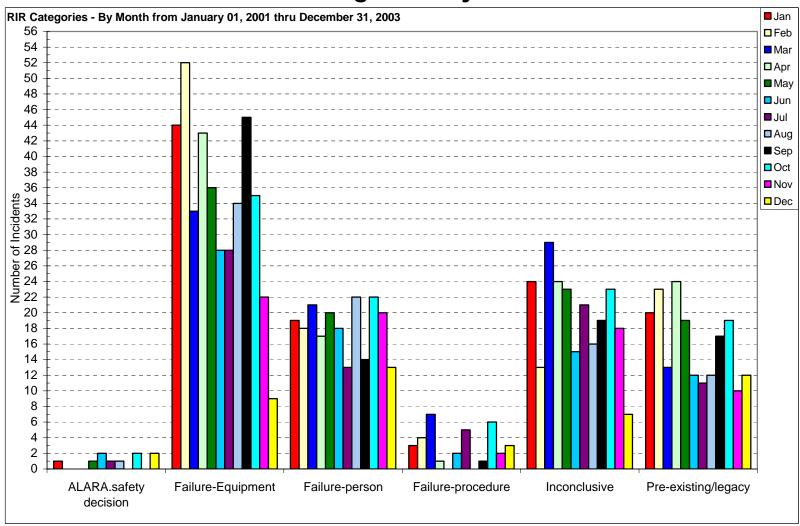
RIR Categories - LANL Totals



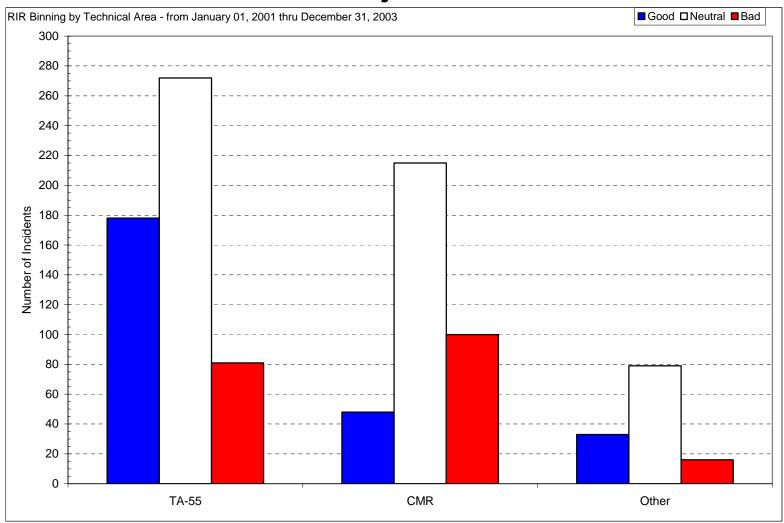
RIR Categories - by Area



RIR Categories - by Month



RIR's Binned by Technical Area



RIR's Binned by Month

